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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,520	12/05/2003	Roy Hirst	MS305473.1/MSFTP491US	2369

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EXAMINER	
RADTKE, MARK A	
ART UNIT	**PAPER NUMBER**
2165	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/729,520	HIRST, ROY	
	Examiner	Art Unit	
	Mark A. X Radtke	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,6-24,26-30 and 32-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6-24, 26-30 and 32-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29 November 2006 has been entered.

Remarks

2. In response to communications filed on 29 November 2006, claim(s) 31 is/are cancelled, claim(s) 1-2, 4, 6-9, 11-13 and 18-22 is/are amended, and new claim(s) 33 and 34 is/are added per Applicant's request. Therefore, claims 1-4, 6-24, 26-30 and 32-34 are presently pending in the application, of which, claim(s) 1, 22-23 and 32-33 is/are presented in independent form.

Claim Objections

3. Claims 7 and 16 are objected to because of the following informalities:

a. In claim 7, at line 2, "can be" should be deleted.

b. In claim 16, at line 2, "ad" should be changed to --and--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 6-7, 9-12, 20, 22-24, 26, 28-29 and 32-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Sadahiro (U.S. Pat. No. 6,237,136).

As to claim 1, Sadahiro teaches a system that facilitates finding documentation (see Abstract), comprising:

a query component that receives a request for technical documentation, the request comprising terminology of a first vocabulary corresponding to a first programming language (see figure 6, step 402 and see figure 2, element 202 and see column 2, lines 43-48);

a mapping component that correlates terminology of the first vocabulary to semantically equivalent terminology of a second vocabulary related to a second

programming language (see figure 6, step 408 and see figure 2, element 204 and see column 3, lines 1-7); and

a discovery component that retrieves technical documentation based upon the terminology of the second vocabulary that is semantically equivalent to the terminology of the first vocabulary employed in the request (see column 3, lines 12-19).

As to claim 2, Sadahiro teaches the query component receives user input as a request for information, the request including at least one of text input, voice encoded input, video camera input, and audio input (see column 3, line 58 – column 4, line 11).

As to claims 3 and 28, Sadahiro teaches the request for information is in the form of a natural language or syntax that is familiar to the user including terms and expressions that have been employed over time by the user (See column 3, lines 1-7. A user must be "familiar" with a language to program in it).

As to claim 4, Sadahiro teaches the user input is processed by a parser into function objects relating to information components that are processed to facilitate desired information retrieval (see Abstract).

As to claim 6, Sadahiro teaches the mapping component includes rules or models that map or analogize a first set of terms with a second set of terms (see column 4, line 42, "syntax rules").

As to claim 7, Sadahiro teaches the functional objects are employed by the mapping component to build or create search terms or queries that are can be applied to a remote or local database (see column 2, line 60, "function database").

As to claim 9, Sadahiro teaches the functional objects are associated with a decision-theoretic analysis that includes analyzing extrinsic evidence or data of a user's present context state, and directing information in accordance with the data (see column 5, lines 12-35).

As to claim 10, Sadahiro teaches the evidence includes at least one of keyboard activities, mouse movements, microphone inputs, camera inputs, time information, and electronic calendar information (see column 3, line 58 – column 4, line 11).

As to claim 11, Sadahiro teaches the discovery component includes at least one of an automated search engine, an indexing engine, and a structured query language engine for retrieving information from a database (see column 4, line 59 – column 5, line 12).

As to claims 12 and 29, Sadahiro teaches the mapping component further comprising at least one of a technical vocabulary object, a development vocabulary

object, a synonym object, an index object, and a prioritization object to facilitate retrieval of information (see column 4, lines 54-67).

As to claim 20, Sadahiro teaches further comprising a graphical user interface to depict a cross reference of terminology of the first vocabulary with terminology of the second vocabulary (see figure 4).

As to claim 22, Sadahiro teaches a computer readable medium having computer readable instructions stored thereon for implementing the query component, the mapping component, and the discovery component of claim 1 (see Abstract).

As to claim 23, Sadahiro teaches a computer-based information retrieval system (see Abstract), comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

As to claim 24, Sadahiro teaches a method to facilitate automated information retrieval (see Abstract), comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

As to claim 26, Sadahiro teaches further comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

As to claim 32, Sadahiro teaches a computer readable medium having a data structure stored thereon (see Abstract), the data structure comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

As to claim 33, Sadahiro teaches a computer implemented method for finding technical documentation (see Abstract), the method comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 1 above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 8, 13-19, 27, 30 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadahiro as applied to claims 1, 24 and 26 above and further in view of Hofmann (U.S. Pat. No. 6,687,696).

As to claims 8 and 27, Sadahiro does not explicitly teach the mapping component further comprises at least one of a rule, a learning algorithm, an automated classification method, an inference model, a probability model, a statistical model, a neural network, a Support Vector Machine (SVM), a Naïve Bayes model, a Bayes network, a decision tree, a similarity-based model, a vector-based model, and a Hidden Markov Model.

Hofmann teaches the mapping component further comprises at least one of a rule, a learning algorithm, an automated classification method, an inference model, a probability model, a statistical model, a neural network, a Support Vector Machine (SVM), a Naïve Bayes model, a Bayes network, a decision tree, a similarity-based model, a vector-based model, and a Hidden Markov Model (see column 2, lines 18-67).

Therefore, it would have been obvious to one having ordinary skill in the relevant art at the time the invention was made to have modified Sadahiro by the teaching of Hofmann because "an automated filtering system has to take into account the diversity of preferences and the inherent relativity of information value" (see Hofmann, column 1, lines 30-34).

As to claim 13, Sadahiro does not explicitly teach the discovery component further comprising an instrumentation component to determined an importance value for a retrieved technical document.

Hofmann teaches the discovery component further comprising an instrumentation component to determined an importance value for a retrieved technical document (see column 2, line 51, "score").

Therefore, it would have been obvious to one having ordinary skill in the relevant art at the time the invention was made to have modified Sadahiro by the teaching of Hofmann because "an automated filtering system has to take into account the diversity of preferences and the inherent relativity of information value" (see Hofmann, column 1, lines 30-34).

As to claim 14, Sadahiro, as modified, teaches the instrumentation component tracks and maps successful and unsuccessful attempts to discover and interpret technology-specific and programming-language-specific functionality employing a natural or professional language (see Hofmann, column 2, lines 27-31).

As to claim 15, Sadahiro, as modified, teaches further comprising a database for search attempts that indicates a technical value for selected technical information within a documentation set or other data structure residing in the database (see Hofmann, column 2, line 51).

As to claim 16, Sadahiro, as modified, teaches the instrumentation component monitors at least one of visible technical documentation, search engine activity, ad network traffic activity (see Hofmann, column 2, lines 27-31).

As to claims 17 and 30, Sadahiro, as modified, teaches the instrumentation component monitors at least one of a counter, a type of word or phrase employed in a search, an implied or inferred measurement of data activity and an explicit request from users regarding a data source's technical value, ranking or merit (see Hofmann, column 17, lines 23-53).

As to claim 18, Sadahiro, as modified, teaches further comprising a graphical user interface to determine a value for a technical document (see figure 4).

As to claims 19 and 34, Sadahiro, as modified, teaches the user interface includes at least one of a ratings scale, a feedback component to allow users to determine what other thought of the technical document, and an input box to enable users to submit feedback as to why they ranked a particular technical document in the manner that was selected (see Hofmann, column 17, lines 25-53).

8. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sadahiro as applied to claim 20 above, and further in view of Jennings ("Special Edition Using Access 97, Second Edition", published 9 October 1997, section " Working with Relations, Key Fields, and Indexes").

As to claim 21, Sadahiro does not explicitly teach the cross reference includes at least one of a table of terminology of the first vocabulary displayed with a table of terminology of the second vocabulary, a single table showing cross-functional relationships include arrows or other indicators depicting relationships between terminology, a modular or graphical output including a block diagram in terminology of the first vocabulary that highlights or points to a corresponding block diagram of terminology of the second vocabulary, a system drawing to show one component's relationship to the system in terminology of the first vocabulary while also illustrating, fading, superimposing, or highlighting a related term on the system drawing to detail a relationship between terminology of the second vocabulary, and contrast blocks of diagrams that are displayed detailing differences with conventional terminology or design practices.

Jennings teaches the cross reference includes at least one of a table of terminology of the first vocabulary displayed with a table of terminology of the second vocabulary, a single table showing cross-functional relationships include arrows or other indicators depicting relationships between terminology, a modular or graphical output including a block diagram in terminology of the first vocabulary that highlights or points to a corresponding block diagram of terminology of the second vocabulary, a system drawing to show one component's relationship to the system in terminology of the first vocabulary while also illustrating, fading, superimposing, or highlighting a related term on the system drawing to detail a relationship between terminology of the second

vocabulary, and contrast blocks of diagrams that are displayed detailing differences with conventional terminology or design practices (see figure 4.31).

Therefore, it would have been obvious to one having ordinary skill in the relevant art at the time the invention was made to modify Sadahiro by the teaching of Jennings because "the Code Generator 204 itself has a GUI" (see Sadahiro, column 18, line 39).

Response to Arguments

9. Applicant's arguments filed on 29 November 2006 with respect to the rejected claims in view of the cited references have been fully considered but are moot in view of the new grounds for rejection.

Additional References

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of art with respect to document translation in general:

Doc. No.	Assigned to
US 4943932 A	Lark; Jay S. et al.
US 6158031 A	Mack; Keith A. et al.
US 6651253 B2	Dudkiewicz; Gil Gavriel et al.
US 20030126559 A1	Fuhrmann, Nils
US 6675370 B1	Sundaresan; Neelakantan

"Literate Programming" by Donald Knuth
"The Design of Distributed Hyperlinked Programming Documentation" by Lisa Friendly
"Programming Pearls – Literate Programming" by Jon Bentley
"Literate Programming Simplified" by Norman Ramsey

Conclusion

11. Any inquiry concerning this communication or earlier communications should be directed to the examiner, Mark A. Radtke. The examiner's telephone number is (571) 272-7163, and the examiner can normally be reached between 9 AM and 5 PM, Monday through Friday.

If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (800) 786-9199.

maxr
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19 February 2007

TM 2/20/07

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
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